

What Is Claimed Is:

1. A computer implemented method of enabling an object-oriented application to access in an object-oriented manner a procedural operating system having a native procedural interface during run-time execution of the application in a computer having a memory component, the method comprising the steps of:
 - (a) locating in the application an object-oriented statement which accesses a service provided by the operating system;
 - (b) translating the object-oriented statement to a procedural function call compatible with the native procedural interface of the operating system and corresponding to the object-oriented statement; and
 - (c) executing in the computer the procedural function call to thereby cause the operating system to provide the service on behalf of the application.
2. The method of claim 1 in which an object-oriented class library includes related object-oriented classes having class methods for accessing services provided by the operating system using procedural function calls compatible with the native procedural interface of the operating system, wherein the object-oriented statement located in the application is defined by the class library, further comprising the step of storing in the memory component a code library comprising computer program logic implementing the object-oriented class library.
3. The method of claim 2, wherein step (b) comprises the steps of identifying one or more methods in the class library corresponding the object-oriented statement, and copying the identified methods to a portion of virtual memory in the computer previously allocated to the application, and wherein step (c) comprises the step of executing the identified methods.

- 1 4. An apparatus for enabling an object-oriented application to access in an object-oriented
2 manner a procedural operating system having a native procedural interface, the apparatus
3 comprising:
- 4 (a) a computer;
 - 5 (b) a memory component in the computer;
 - 6 (c) a code library, stored in the memory component, comprising computer program logic
7 implementing an object-oriented class library, the object-oriented class library
8 comprising related object-oriented classes for enabling the application to access in an
9 object-oriented manner services provided by the operating system, the object-oriented
10 classes comprising methods for accessing the operating system services using procedural
11 function calls compatible with the native procedural interface of the operating system;
12 and
 - 13 (d) means, in the computer, for processing object-oriented statements contained in the
14 application and defined by the class library by executing methods from the class library
15 corresponding to the object-oriented statement.
- 1 5. The apparatus of claim 4, wherein the means for processing the object-oriented
2 statements operates in the computer during run-time execution of the application.

- 1 6. A computer implemented method of enabling an object-oriented application to access in
2 an object-oriented manner a procedural operating system having a native procedural
3 interface during run-time execution of the application in a computer having a memory
4 component, in which an object-oriented class library comprises related object-oriented
5 classes having class methods for accessing services offered by the operating system using
6 procedural function calls compatible with the native procedural interface of the operating
7 system, the application including object-oriented statements defined by the class library
8 to access the operating system services, the method comprising the steps of:
- 9 (a) storing in the memory component a code library comprising computer program logic
10 implementing the object-oriented class library; and
- 11 (b) processing the object-oriented application in the computer by executing methods from the
12 class library corresponding to the object-oriented statements in the application.

- 1 7. An apparatus for providing an object-oriented interface to a procedural operating system
2 having a native procedural interface, the apparatus comprising:
3 (a) a computer;
4 (b) a memory component in the computer; and
5 (c) a code library, stored in the memory component, comprising computer program logic
6 implementing an object-oriented class library, the object-oriented class library
7 comprising related object-oriented classes for enabling an object-oriented application to
8 access in an object-oriented manner services provided by the operating system, the
9 object-oriented classes comprising methods for accessing the operating system services
10 using procedural function calls compatible with the native procedural interface of the
11 operating system; wherein object-oriented statements defined by the object-oriented class
12 library are insertable into the application to enable the application to access in an object-
13 oriented manner the operating system services during run-time execution of the
14 application in the computer.

- 1 8. A computer program product, adapted for use with a computer comprising a procedural
2 operating system having a native procedural interface, the computer program product
3 comprising:
- 4 (a) a storage medium readable by the computer; and
- 5 (b) a code library, stored in the storage medium, comprising computer program logic
6 implementing an object-oriented class library, the object-oriented class library
7 comprising object-oriented classes for enabling an object-oriented application to access in
8 an object-oriented manner services provided by the operating system, the object-oriented
9 classes comprising methods for accessing the operating system services using procedural
10 function calls compatible with the native procedural interface of the operating system;
- 11 (c) wherein object-oriented statements defined by the object-oriented class library are
12 insertable into the application to enable the application to access in an object-oriented
13 manner the operating system services during run-time execution of the application in the
14 computer.
- 1 9. A computer implemented method of enabling a procedural application to access in a
2 procedural manner an object-oriented operating system having a native object-oriented
3 interface during run-time execution of the application in a computer, the method
4 comprising the steps of:
- 5 (a) locating in the application a procedural statement which accesses a service provided by
6 the operating system;
- 7 (b) translating the statement to an object-oriented function call compatible with the native
8 object-oriented interface of the operating system and corresponding to the procedural
9 statement; and
- 10 (c) executing in the computer the object-oriented function call to thereby cause the operating
11 system to provide the service on behalf of the application.